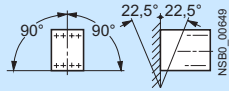


Technical specifications

Starter		Type	3TE68	
General data				
Permissible mounting position, assembly note <sup>1)</sup>				
Mechanical endurance		Operating cycles	3 million	
Type of individual contactors		K1 line contactor	Type	3TF68
		K3 delta contactor	Type	3TF68
		K2 star contactor	Type	3RT10 75
Unassigned auxiliary contacts of the individual contactors			2)	
Current-carrying capacity with reversing time up to 10 s				
Rated operational current $I_e$	up to 690 V	A	1090	
Rated power for induction motors with 50 Hz	at 230 V	kW	355	
	400 V	kW	612	
	500 V	kW	800	
	690 V	kW	1046	
Switching frequency with overload relay		h <sup>-1</sup>	3	
Current-carrying capacity with reversing time up to 15 s				
Rated operational current $I_e$	up to 500 V	A	923	
	690 V	A	883	
Rated power for induction motors with 50 Hz	at 230 V	kW	295	
	400 V	kW	515	
	500 V	kW	677	
	690 V	kW	885	
Switching frequency with overload relay		h <sup>-1</sup>	2	
Current-carrying capacity with reversing time up to 20 s				
Rated operational current $I_e$	up to 500 V	A	800	
	690 V	A	765	
Rated power for induction motors with 50 Hz	at 230 V	kW	244	
	400 V	kW	444	
	500 V	kW	590	
	690 V	kW	770	
Switching frequency with overload relay		h <sup>-1</sup>	2	
Short-circuit protection				
Main circuit				
Fuse links, gL/gG				
LV HRC 3NA, DIAZED 5SB, NEOZED 5SE				
- According to IEC 60947-4-1/ EN 60947-4-1	Type of coordination "1"	A	1000	
	Type of coordination "2"	A	500 <sup>3)</sup>	
Auxiliary circuit				
Fuse links gL/gG		A	10	
(weld-free protection at $I_k \geq 1$ kA)				
DIAZED 5SB, NEOZED 5SE				
or miniature circuit breakers with C characteristic				
( $I_k < 400$ A)				

1) If the contactors are mounted at a 90° angle (conducting paths horizontally one above the other), the following reductions apply: Switching frequency: to 80 % of the standard values.

2) See circuit diagrams of the control circuits.

3) The maximum motor rated current must not be exceeded.

# 3TD, 3TE Contactor Assemblies

## 3TE6 contactor assemblies for wye-delta starting, 630 kW

Contactor assembly	Type	3TE68
<b>Short-circuit protection with fuses for motor feeders with short-circuit currents up to 50 kA and 690 V</b>		
<b>Rated motor current</b>	A	277 ... 1090
<b>Overload relay</b>	Type	3RB20 66
<b>Setting range</b> (the overload relays must be set to 0.58 times the motor rated current)	A	160 ... 630
<b>Permissible back-up fuses for starters,</b> comprising contactor assemblies and overload relays. Single or double infeed <sup>1)</sup>		
<ul style="list-style-type: none"> <li>Fuse links LV HRC Type 3NA, DIAZED Type 5SB, NEOZED Type 5SE</li> </ul>		
- Type of coordination "1"	A	1000
- Type of coordination "2"	A	500
<ul style="list-style-type: none"> <li>LV HRC fuse links type 3ND, aM operational class</li> </ul>		
- Type of coordination "2"	A	630
Fuse links, Siemens Canada, HRC fuses, Type II	A	1000
Fuse links UL-listed fuses CLASS L	A	1200
Fuse links British Standard Fuses BS88		
- Type of coordination "1"	A	1000
- Type of coordination "2"	A	500

For short-circuit protection with overload relays see Protection Equipment: Overload Relays -> 3RB2 Solid-State Overload Relays.

Use double infeed for higher motor rated currents (see circuit diagram).

<sup>1)</sup> The maximum motor rated current must not be exceeded.